

FORM 1449\*

## INFORMATION DISCLOSURE STATEMENT

Docket Number:

Application Number:

316541US01

10/723,382

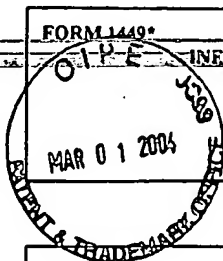
IN AN APPLICATION

(Use several sheets if necessary)

Applicant: MUNNS

Filing Date: 11/25/2003

Group Art Unit: UNKNOWN



## U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
<i>MEW</i>	3,677,836	07/18/1972	Lorenz			
	4,205,331	05/27/1980	Esaki et al.			
	4,673,959	06/16/1987	Shiraki et al.			
	5,087,576	02/11/1992	Edmond et al.			
	5,107,314	04/21/1992	Kahng et al.			
	5,138,408	08/11/1992	Ando			
	5,147,817	09/15/1992	Frazier et al.			
	5,162,243	11/10/1992	Streit et al.			
	5,192,987	03/09/1993	Khan et al.			
	5,208,820	05/04/1993	Kurihara et al.			
	5,284,782	02/08/1994	Jeong et al.			
	5,296,395	03/22/1994	Khan et al.			
	5,300,186	04/05/1994	Kitahara et al.			
	5,408,487	04/18/1995	Uchida et al.			
	5,435,264	07/25/1995	Santiago et al.			
	5,449,930	09/12/1995	Zhou			
	5,484,664	01/16/1996	Kitahara et al.			
	5,690,737	11/25/1997	Santiago et al.			
	5,665,618	09/09/1997	Meyer et al.			
	5,670,798	09/23/1997	Schetzina			
	5,679,965	10/21/1997	Schetzina			
	5,751,753	05/12/1998	Uchida			
	5,804,834	09/08/1998	Shimoyama et al.			
	5,901,165	05/04/1999	Uchida			
	5,903,017	05/11/1999	Itaya et al.			
<i>↓</i>	5,932,006	08/03/1999	Santiago et al.			

EXAMINER

*Mutter Wane*

DATE CONSIDERED

*12/11/04*

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form for next communication to the Applicant.

<b>FORM 1449*</b> <b>INFORMATION DISCLOSURE STATEMENT</b>  <b>IN AN APPLICATION</b> (Use several sheets if necessary)	Docket Number:	Application Number:
	316541USU1	10/723382
	Applicant: MUNNS	
	Filing Date: 11/25/2003	Group Art Unit: UNKNOWN

McW	6,048,748	04/11/2000	Khare et al.			
	6,051,866	04/18/2000	Shaw et al.			
	6,147,364	11/14/2000	Itaya et al.			
	6,150,674	11/21/2000	Yuri et al.			
	6,201,264 B1	03/13/2001	Khare et al.			
	6,208,001 B1	03/27/2001	Santiago et al.			
	6,306,212 B1	10/23/2001	Santiago et al.			
	6,342,411 B1	01/29/2002	Pitts, Jr.			
	6,521,961 B1	02/18/2003	Costa et al.			
<b>OTHER DOCUMENTS</b> (Including Author, Title, Date, Pertinent Pages, Etc.)						
			Fan, Z. et al., "Suppression of leakage currents and their effect on the electrical performance of AlGaIn/GaN modulation doped field-effect transistors," <i>Appl. Phys. Lett.</i> , Vol. 69, No. 9, pp. 1229-1231 (August 26, 1996)			
			Kusakabe, K. et al., "Reduction of threading dislocations in migration enhanced epitaxy grown GaN with N-polarity by use of AlN multiple interlayer," <i>Journal of Crystal Growth</i> , Vol. 230, pp. 387-391 (2001)			
			Heying, B. et al., "Role of threading dislocation structure on the x-ray diffraction peak widths in epitaxial GaN films," <i>Appl. Phys. Lett.</i> , Vol. 68, No. 5, pp. 643-645 (January 29, 1996)			
			Hirayama, H. et al., "Fabrication of a low-threading-dislocation-density Al <sub>x</sub> Ga <sub>1-x</sub> N buffer on SiC using highly Si-doped Al <sub>x</sub> Ga <sub>1-x</sub> N superlattices," <i>Appl. Phys. Lett.</i> , Vol. 80, No. 12, pp. 2057-2059 (March 25, 2002)			
			Nitta, S. et al., "Mass transport and the reduction of threading dislocation in GaN," <i>Applied Surface Science</i> , Vol. 159-160, pp. 421-426 (2000)			
			Sverdlov, B. et al., "Formation of threading defects in GaN wurtzite films grown on nonisomorphic substrates," <i>Appl. Phys. Lett.</i> , Vol. 67, No. 14, pp. 2063-2065 (October 2, 1995)			
			Wang, H. et al., "AlN/AlGaIn superlattices as dislocation filter for low-threading-dislocation thick AlGaIn layers on sapphire," <i>Appl. Phys. Lett.</i> , Vol. 81, No. 4, pp. 604-606 (July 22, 2002)			
			Weimann, N. et al., "Scattering of electrons at threading dislocations in GaN," <i>J. Appl. Phys.</i> , Vol. 83, No. 7, pp. 3656-3659 (April 1, 1998)			
			Zhang, Y. et al., "Charge control and mobility studies for an AlGaIn/GaN high electron mobility transistor," <i>J. Appl. Phys.</i> , Vol. 85, No. 1, pp. 587-594 (January 1, 1999)			
			Zhang, X. et al., "Enhanced optical emission from GaN films grown on a silicon substrate," <i>Appl. Phys. Lett.</i> , Vol. 74, No. 14, pp. 1984-1986 (April 5, 1999)			

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PATENT TRADEMARK OFFICE

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